## GENERAL REFRACTORIES GREFCO AP GREEN REFRACTORIES

Constructed: 1942-43
Address: 2200 North 1100 West
Present owner: AP Green Industries, Inc.

Immediately after the 7 December 1941, Japanese attack on Pearl Harbor the Defense Plant Corporation (D.P.C.), a federal agency, began constructing defense plants at strategic locations throughout the Intermountain region. The Geneva Steel Plant, which provided jobs to thousands of local people, was built during this period and then leased to U.S. Steel Corporation.

A product essential to steel production is fire or refractory brick, which is used to line steel reducing furnaces and coke ovens. Lehi Mayor Dean Prior reported in the 30 April 1942, *Lehi Free Press* that the D.P.C. had decided to construct a fire brick factory for supplying the furnaces and ovens at Geneva, on the site of the old Slater Brick Yard.

Ryberg Construction Company began work on the \$600,000 plant in July 1942. When completed, the facility was first leased to the California-based E.M. Smith Company (1943-45), then to Gladding, McBean & Company (1945-46).

In August of 1946 William a. Hauck, head of the steel division of the War Assets Corporation, came to Lehi to inspect the brick plant. He declared the facility surplus property (the war had ended), and announced it would be placed on the bidding block.

General Refractories Company (GREFCO) of Philadelphia, which bid \$375,000, became the new owner of the Lehi plant, which at that time included the main manufacturing building, six beehive kilns (each with 100,000-brick capacity), a locker/shower building, office building, storage shed, machine tools, and brickmaking, laboratory, and testing equipment. Wilson C. Rhone, who had

been serving as Gladding, McBean & Company superintendent, was hired in the same capacity by General Refractories.

By 1949 GREFCO employed forty-five people with an annual payroll of \$110,000. The 450,000 bricks manufactured monthly at the plant were shipped to Geneva Steel, Bethlehem Pacific Coast Steel Corporation (Seattle), Columbia Steel (Pittsburg, California), Colorado Fuel and Iron Corporation (Pueblo), and the American Smelting and Refining Company (Garfield, Utah).

In 1973 Ralph V. Lawrence, division vice-president and general manager of GREFCO, announced a one million dollar expansion program at the Lehi Works. The new grinding and burning facility, which created fifteen additional jobs, specialized in direct-bonded brick wrapped in steel casing. This product, previously available only from a Gary, Indiana plant, is made by heating the raw materials until they fuse together without a bonding agent. This process (patented by GREFCO) allows the brick to be used in the hottest applications such as Geneva Steel's open-hearth furnaces. This prolongs the life of the brick by preventing the furnace gas from circulating in the brick linings.

Recently the company was sold to A.P. Green Industries which continues to manufacture several hundred varieties and sizes of brick. Products range from nine-inch brick to intricate shapes and skews. Despite advancements in mechanization, much of the work at the brick plant is still done by hand. Staking the kilns, which must withstand temperatures of over 3,000 degrees, for example, requires five days. The oven is then heated to 2,720 degrees for approximately ten days. Cooling requires another ten days and the removal of the brick an additional five days.

In recent years the company has expanded its clientele beyond Geneva Steel, which has been a rather inconsistent buyer at times because of steel market fluctuations. The plant now supplies dozens of other mills and factories around the country. Raw materials for A P Green's brick are shipped to Lehi from a multitude of exotic places including Austria, Greece, the Philippines, and Africa.